Software Processes and Management (SWEN90016)

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Teaching Staff

- **Lecturers**
  - Rachelle Bosua (rachelle.bosua@unimelb.edu.au)
  - Shanika Karunasekera (karus@unimelb.edu.au)

- **Tutors**
  - Head Tutor:
    - William Tio
  - Tutors:
    - Eileen O'Callaghan
    - Jessica Tobagus
    - Rahul Sharma

A bit about myself

- **Shanika Karunasekera:**
  - Academic in the Department of Computing and Information Systems

- **Education:**
  - B. Sc. (First Class Honours) in Electronic and Telecommunication Engineering - University of Moratuwa, Sri Lanka
  - PhD in Electrical Engineering (Specialization: Image Processing) - University of Cambridge, UK

- **Industry Experience:**
  - Distinguished Member of Technical Staff, Software Architect (1995 – 2002)- Lucent Technologies, Bell Labs Innovation (AT&T Bell Labs), USA

A bit about myself

- **Academic Experience:**
  - Academic in the department from 2003 – to date
  - Teaching
    - Software Engineering and Distributed Computing
  - Research Interests
    - Distributed computing
    - Peer-to-peer computing
    - Sensor networks
    - Real-time data analytics

Subject Objectives

- Select appropriate ***software engineering processes and practices*** for specific software engineering projects
- Manage ***team dynamics and professional communication***
- ***Plan and manage*** projects
- ***Identify risks*** and modify project activities to mitigate these risks
- Manage software project activities to ***ensure a quality product***
- Describe human and organisational implications of change and explain the organisational ***change process***

Lectures and Tutorials

- **Two one-hour lectures**
  - 3.15 – 4.15 pm Wednesday
  - 3.15 – 4.15 pm Friday

- **One one-hour tutorial/workshop**
  - each of you will be assigned to one
  - starting week 2

Outline

- **Part I: Introduction**
  - Topic 1: An introduction to software engineering/development
  - Topic 2: An introduction to process and project management
- **Part II: The controlling disciplines**
  - Topic 3: Software Development Lifecycle Models
  - Topic 4: Governance, Teams, People, and Human Resources
  - Topic 5: Planning and Scheduling
  - Topic 6: Configuration Management
- **Part III: The monitoring disciplines**
  - Topic 7: Metrics, Cost and Effort Estimation
  - Topic 8: Risk
  - Topic 9: Quality Assurance

Expectation from students

- Familiarise with the pre-requisite material
- Read subject notes and additional readings
- Attend lectures and participate in discussions
- Attend tutorials and actively engage in discussions
- Read LMS announcements and participate in forums

Assessment

- **Project and Assignment (50%)**
  - Individual Assignment 20% -
    - will be released week 3
    - due Friday week 7
  - Group Project 30%
    - form groups of 4 - 5 members from within the tutorial by end of week 2
    - submission will be in three stages and the details will be provided during the semester
- **Final Examination (50%)**
  - 2 hour, closed book, examination at the end of the semester
- **Hurdle**
  - To pass the subject, students must obtain at least 50% in project and assignment combined, and 50% in the final examination.

Getting Help

- **Lecturers**
  - During the lecture please feel free to ask questions on anything that is not clear
  - Consultation hours: Tuesday 10 am – 11 am (Doug McDonell 7.17)
  - Additional consultation by appointment - send an email to make an appointment
- **Tutors**
  - Ask questions during the tutorial
- **LMS forums**

Plagiarism and Collusion

- **With the exception of the group project, all assessment items are individual, and submissions must be entirely the work of the person submitting them.**

- **Read the university policy on academic honesty and plagiarism (see http://academichonesty.unimelb.edu.au/policy.html).**

Even if you discuss the assignments with another student you are obliged to ensure that all work that you submit for assessment purposes is your independent work. All students should familiarise themselves with the procedures that must be followed if plagiarism or collusion is detected, and the penalties that must be applied — they are quite harsh.